Case: 1:11-cv-07972 Document #: 137-1 Filed: 11/06/13 Page 1 of 11 PageID #:2827

EXHIBIT A

UNITED STATES DISTRICT COURT NORTERHN DISTRICT OF ILLINOIS EASTERN DIVISION

NICK PEARSON, FRANCISCO PADILLA, CECILIA LINARES, AUGUSTINA BLANCO, ABL GONZALEZ, and RICHARD JENNINGS, On Behalf of Themselves and All Others Similarly Situated,

Plaintiffs,

v.

NBTY, INC., a Delaware corporation; and REXALL SUNDOWN, INC., a Florida corporation; and TARGET CORPORATION, a Minnesota Corporation,

Defendants.

Case No.: 11CV 07972

Supplemental Report of Keith A. Reutter, Ph.D.,

I. Introduction, Assignment and Summary of Conclusions

- 1. I am a Ph.D. economist and Principal in the Washington, D.C. office of the Berkeley Research Group ("BRG"). BRG is an economic and financial consulting firm with offices in major U.S. and foreign cities. I have been associated with BRG since shortly after its founding in early 2010, and have been professionally employed as an Economist for over 15 years. I hold a Bachelor of Science and Master of Arts in Economics from the University of Texas-Arlington, as well as a Doctor of Philosophy in Economics from Auburn University.
- 2. On September 4, 2013, I submitted a report in the above captioned matter wherein I estimated the expected benefit that will accrue to consumers, including members of the proposed Class, as a result of the injunctive relief agreed to by the settling parties. In that report, I relied on defendant Rexall's internal documents to provide a reasonable estimate of the likely economic impact of the proposed labeling changes. That estimate was based on the information available to me at the time and predicted a lower price, a decline in sales volume, or both, as a result of the proposed labeling changes.² Using historical dollar sales data for Osteo Bi-Flex as a proxy I estimated the lower prices, all other things equal, that might reasonably result due to the labeling changes and then used that as one measure of the economic impact of those labeling changes. I also predicted an expected drop in the sales volume of Osteo Bi-Flex. The predicted decline in sales volume was based on the expectation that some consumers will stop purchasing Osteo Bi-Flex when the "renews and rebuilds" cartilage representations are removed from the label. The expected decline in sales volume was based on Rexall's internal documents that indicate that a high percentage of Osteo Bi-Flex purchasers responded that the "renews and rebuilds" cartilage representations are important to their purchasing decisions.

¹ Report of Keith A. Reutter Regarding Settlement, dated August 30, 2013, hereinafter "Reutter Report."

² Reutter Report, ¶ 8.

3. I understand that the Court has raised the question of whether it is possible to empirically measure the value of the labeling changes, required by the Settlement Agreement, by analyzing defendants' sales and pricing data for products before and after the labeling changes are implemented, in order to assign a specific monetary value to the relief afforded to the Class and consumers brought about by the labeling changes. It is my opinion that such a computation, relying on defendant's data alone, would not measure the actual economic impact of the labeling changes, and thus would not answer the question. This is because, like any retail product, there are other confounding economic factors, in addition to the proposed labeling changes, at work that continuously influence the price and sales of the covered products. These additional factors would have to be taken into consideration in order to measure the actual economic impact of the labeling changes in terms of prices and volume of sales. For example, a reduction in competition from companies selling comparable products or an increase in advertising by defendants may result in an increase in the price or volume sold of the covered products following the labeling changes. In such a situation, an observed increase (or decrease) in the price or volume sold of the covered products would mean little viewed in isolation, and would not value the effect of the labeling changes. A regression analysis would have to be performed to take into consideration these, and possibly other, additional factors, to isolate the actual monetary value of the labeling changes.³

_

³ Regression analysis is a widely accepted statistical technique that is used to measure or determine the impact that one or more independent, or explanatory, variables has on a dependent variable. For instance, regression analysis can be used to determine the impact that an alleged price fixing cartel has on the price of a good. For a discussion of the use of regression analysis in determining impact in a legal context, see: William H. Page, editor, *Proving Antitrust Damages: Legal and Economic Issues* (American Bar Association, 1996); Daniel L. Rubinfeld, "Reference Guide on Multiple Regression", in *Reference Manual on Scientific Evidence:* 2nd *Edition* (St. Paul: West Group, 2000). For a general discussion of regression analysis, see: Damodar N. Gujarati, *Basic Econometrics:* 4th *Edition* (Boston: McGraw-Hill, 2003).

4. In this regard I have reached the following conclusions: (1) a regression analysis, using defendant's data alone, would not be able to estimate the monetary value of the labeling changes; (2) a regression analysis of the impact of the proposed labeling changes would require a substantial amount of data that is not currently available to plaintiffs, or defendants; and (3) assuming these data issues could be overcome, which in my opinion is unlikely, such a study could not commence for at least two years following the labeling changes, which I understand will not take place until 6 months following final approval of the settlement. Such a regression analysis would likely cost in excess of \$500,000. This cost estimate is based on my experience having conducted at least two dozen such studies, where the data was readily available, over the last 15 years of my professional career.

II. Inadequacy of Defendant Data

- 5. As described in the Reutter Report, the expected impact of the proposed labeling changes is to reduce the demand for Rexall's Osteo Bi-Flex products, resulting in a decrease in both the price and quantity sold, all other things equal. Others in the industry, or Rexall itself, may be able to partially or completely mask the impact of the labeling changes by, among other things, increasing the amount of money spent advertising glucosamine/chondroitin products thereby increasing overall demand and price.
- 6. The only sales data that plaintiffs can obtain directly from defendants is Rexall's sales transactions. As the manufacturer of Osteo Bi-Flex, Rexall's sales transactions reflect the price and quantity at which sales are made to wholesalers, distributors and others. Rexall's transaction data does not include the price at which Osteo Bi-Flex is sold to consumers at retail. Further, defendant's data does not include the retail prices at which the covered private label

glucosamine/chondroitin products, manufactured by defendants, are sold. Thus, Rexall's transaction data alone is inadequate to address the impact the labeling changes will have on the prices paid by consumers.

7. It may be possible to overcome the inadequacy of defendant's transaction data by purchasing retail sales data from a third party vendor, such as ACNielsen. ACNielsen collects retail sales data from the store checkout scanners of participating retail establishments across the U.S.⁴ However, Osteo Bi-Flex is only one of many glucosamine/chondroitin products marketed to consumers. Hence, the actions taken by other glucosamine/chondroitin supplement manufacturers would have to be taken into account since they would likely have an impact on the sales volume and price of Osteo Bi-Flex. Because the sale of Osteo Bi-Flex is likely impacted by exogenous factors, i.e. events beyond the direct control of Rexall, a proper analysis of the impact of the labeling changes would require the purchase of retail sales data for all glucosamine/chondroitin products marketed by Rexall, as well as retail sales data for all of the many other glucosamine/chondroitin products marketed by competitors. The purchase price of this retail sales data would likely cost in excess of \$100,000 given recent estimates I have received for similar data in unrelated matters.

a. Increased Marketing Spending by Rexall

8. As noted above, the expected impact of the labeling changes is to reduce the demand for Osteo Bi-Flex, resulting in a lower price and a lower quantity sold. In order to counter the expected impact of the labeling changes, Rexall could unilaterally increase the amount of advertising and marketing directed at the consuming public. By increasing the

⁴ www.nielsen.com

amount of marketing directed at the consuming public, Rexall could effectively shift the demand curve for Osteo Bi-Flex to mask the actual impact caused by the labeling changes. If Rexall were to undertake such an action the price and quantity sold of Osteo Bi-Flex may very well exceed that which was observed prior to the labeling changes. But this would not mean that the labeling changes had no impact, but rather that these unilateral actions by Rexall masked the impact. Thus, the impact of the labeling changes cannot be determined by merely observing the retail, or wholesale, prices of Osteo Bi-Flex. It would also have to take into account Rexall's advertising and marketing directed at the consuming public.

b. Increased Marketing Spending by Other Manufacturers

9. Because Rexall is not alone in the manufacturing and marketing of glucosamine/chondroitin supplements, the actions of others in the marketplace will necessarily impact the quantity and price of Osteo Bi-Flex sold. If, for example, after the labeling changes Rexall does nothing, but the other manufacturers in the industry either decrease or increase the amount of advertising and marketing directed at consumers, then the price and quantity sold of Osteo Bi-Flex likely will be affected. In the case of a decrease in advertising or marketing by competitors, Rexall may be able to take advantage and either maintain or increase the price of Osteo Bi-Flex, again masking the actual impact of the labeling changes. Further, in the case of an increase in advertising or marketing by competitors, Rexall might be able to maintain or even increase the price and quantity of Osteo Bi-Flex due to what is known as a spillover effect, whereby an increase in advertising of a competing glucosamine/chondroitin product results in higher sales for Rexall. All of this is out of Rexall's control, i.e. is exogenous to Rexall, but must be taken into consideration to properly analyze the impact of the labeling changes. Absent

their voluntary production of this proprietary information, it is highly unlikely that the advertising or marketing budgets of other competitors could be obtained.

c. Increased Marketing Spending by Retail Outlets

10. Similar to the actions taken by other manufacturers of glucosamine/chondroitin, if following the labeling changes, retailers of Osteo Bi-Flex increase the amount of advertising directed at the glucosamine/chondroitin consuming public, then retailers may be able to increase demand and hence affect the price and quantity of Osteo Bi-Flex despite the labeling changes. Again, the data necessary to determine the impact, if any, that retailers might have on the demand for Osteo Bi-Flex is exogenous to Rexall. Absent the voluntary production of this proprietary information, it is highly unlikely that the advertising or marketing budgets of retailers could be obtained. This confounding factor is further compounded by the fact that there are a far greater number of retailers in the marketplace than competitors.

d. Demographic Changes

11. Another factor that would likely impact the price and quantity sold of Osteo Bi-Flex is the demographic makeup of the country. An aging and active population may result in an increase in the demand for glucosamine/chondroitin products, all else equal. While the demographic data necessary to measure the impact of an aging population on the price and volume sold of covered products is likely available from organizations such as the U.S. Census, an analysis would need to be undertaken to determine what demographic information is most relevant. 12. The foregoing are just some of the confounding economic factors, or variables, that would have to be taken into account in order to perform an appropriate regression analysis to determine the true economic impact of the proposed labeling changes.

III. An Economic Analysis of Proposed Labeling Changes

- labeling changes will require a considerable amount of data, most of which is not available from Rexall. First, retail pricing data for glucosamine/chondroitin products will be needed for a period of time preceding and following the proposed labeling changes. Best economic practices suggest a minimum of two years, or 24 months, worth of data on either side of the labeling changes for a total of 48 months of data.⁵ Second, it will be necessary to know the amount of advertising that Rexall spent on a monthly basis for the same 48 month period, broken down by product. Third, it will be necessary to know the amount of advertising dollars spent by manufacturers of competing glucosamine/chondroitin products, over the same 48 months. Fourth, the amount of money spent by retailers to advertise glucosamine/chondroitin products, on a product-by-product basis, will be needed for the 24 months preceding and following the labeling changes. Lastly, age-based demographic information will need to be collected.
- 14. Given the data described above, to determine the impact of the proposed labeling changes, a regression equation in the following form must be performed:

 $P_{OBF} = \beta_0 + \beta_1 (Rexall Advertising) + \beta_2 (Other Manufacturer's Advertising) + \beta_3 (Retail Advertising) + \beta_4 (Demographic Information) + \beta_5 (Labeling Changes);$

⁵ A minimum of 48 months of data is necessary to guarantee the degrees of freedom necessary to yield statistical significance.

where, P_{OBF} is the price of Osteo Bi-Flex and β_5 is a binary, or indicator, variable that takes on the value "0" before the proposed labeling changes and the value "1" following the labeling changes. As noted, it is necessary that two years of monthly data, on either side of the labeling changes, be collected in order to yield sufficient statistical results. Some of the data would necessarily have to be provided by direct competitors. Using the above equation, the coefficient β_5 represents the impact of the labeling changes. If this value is negative, and statistically significant, it would mean that the impact of the labeling changes was to lower the price of Osteo Bi-Flex.

15. If it is possible to overcome the data issues described above, e.g. determining the level of advertising undertaken by manufacturers and marketers of competing glucosamine/chondroitin products, which is highly unlikely, the study as described would likely cost in excess of \$500,000, which would include the value of my time, the time for my support staff, as well as the cost of acquiring the necessary data. Such a study could not be completed for two to three years following the implementation of the labeling changes.

IV. Conclusion

16. I have been asked to determine the feasibility of undertaking a study to determine the actual economic impact of the proposed labeling changes agreed to by the settling parties. As described above, the actual value of the labeling changes cannot be gleaned from an analysis of defendant Rexall's data alone. That is, defendant's wholesale sales transaction data alone will not provide a measure of the actual impact of the labeling changes on consumers. In order to estimate the economic impact of the proposed labeling changes will require the purchase of retail sales data from a vendor such as ACNielsen, and will require knowledge of the advertising

budgets of competing manufacturers and retail outlets. It is unlikely that competing manufacturers or retail outlets would willingly and unilaterally produce the sensitive, confidential and proprietary business information needed. Further, a time period of two years following the effective date of the labeling changes would be required in order give the market sufficient time to adjust to the new labeling.

Keith A Reutter

November 4, 2013